

WHAT IS CLAIMED IS:

[Claim 1] A transmission having a first rotation shaft coaxially fixed to a first turning transmission wheel and a second rotation shaft coaxially fixed to a second turning transmission wheel which are arranged in parallel with each other, a support shaft extended between the first turning transmission wheel and the second turning transmission wheel, an intermediary transfer wheel formed on the support shaft rotatably and movably along a longitudinal direction of the support shaft, wherein the first rotation shaft is rotated by a power device, and a rotational force of which can be transmitted to the second rotation shaft with variable speed, the transmission characterized in that:

each of the first turning transmission wheel and the second turning transmission wheel is formed in a shape of a right circular cone or a right circular cone trapezoid and has an identical vertex angle, and a tapered side peripheral surface of each of the first turning transmission wheel and the second turning transmission wheel faces each other with a constant distance;

the support shaft is arranged between the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel such that it extends in the longitudinal direction along the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel; and

the intermediary transfer wheel contacts with each of the side peripheral surface of the first turning transmission wheel and the side peripheral surface of the second turning transmission wheel and is moveable in the longitudinal direction along the support shaft while maintaining the contact.

[Claim 2]

A transmission characterized in that:

the intermediary transfer wheel is movable in the longitudinal direction along the support shaft by means of an intermediary transfer wheel feeding device;

5 the intermediary transfer wheel feeding device has a moving arm, a drive mechanism that drives the moving arm in the longitudinal direction along the support shaft, and a feeding member provided at an end of the moving arm that moves the intermediary transfer wheel in the longitudinal direction along the support shaft.

10 [Claim 3]

A transmission characterized in that:

15 the support shaft is moveable by a reciprocal movement mechanism to locations close to or away from the first turning transmission wheel and the second turning transmission wheel; the intermediary transfer wheel contacts with the first turning transmission wheel and the second turning transmission wheel when the support shaft is located at the close location, and the intermediary transfer wheel is separated from the first turning transmission wheel and the second turning transmission wheel when the support shaft is located at the away location.

25